

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for preparing hydrogen cyanide by autothermal noncatalytic oxidation of one or more nitrogenous hydrocarbons or a nitrogenous hydrocarbon mixture ~~in which the~~ wherein said nitrogenous hydrocarbons, an oxygen-containing gas, with or without ammonia, with or without water, with or without a gas ~~containing~~ comprising nitrogen oxides and with or without other essentially inert feed gas constituents are introduced into a flame reaction zone, react in the flame reaction zone and a post-reaction zone at a temperature of from 1000 to 1800°C for a reaction time of 0.03 to 0.3 s to form a cleavage gas which comprises ~~at least the constituents~~ hydrogen cyanide, carbon oxides, hydrogen, water, ammonia, nitrogen, light hydrocarbons with or without other cleavage gas constituents, the atomic C/N ratio in the reaction zones being from 1 to 7 and the atomic air ratio  $\lambda_{\text{ato}}$  being  $<0.6$ , ~~the~~ said cleavage gas being cooled and separated.

Claim 2 (Currently Amended): A process as claimed in claim 1, wherein said ammonia is introduced into ~~the~~ said flame reaction zone.

Claim 3 (Currently Amended): A process as claimed in claim 1 ~~or 2~~, wherein ~~the~~ said nitrogenous hydrocarbons ~~used~~ have a C/N ratio of from 1 to 5.

Claim 4 (Currently Amended): A process as claimed in claim 1 ~~or 2~~, wherein ~~the~~ said nitrogenous hydrocarbons ~~used~~ have a C/N ratio of from 5 to 7.

Claim 5 (Currently Amended): A process as claimed in ~~one of claims 1 to 4~~ claim 1, wherein ~~the~~ said nitrogenous hydrocarbons ~~used~~ are one or more residues.

Claim 6 (Currently Amended): A process as claimed in ~~one of claims 1 to 5~~ claim 1, wherein water is introduced into the said flame reaction zone.

Claim 7 (Currently Amended): A process as claimed in ~~one of claims 1 to 6~~ claim 1, wherein one or more additional essentially inert-behaving ~~further~~ feed gas constituents are introduced into said flame reaction zone. ~~the flame~~.

Claim 8 (Currently Amended): A process as claimed in claim 7, wherein ~~the~~ said essentially inert-behaving ~~further~~ feed gas constituents comprise carbon oxides and/or hydrogen obtained from the said cleavage gas.

Claim 9 (Currently Amended): A process as claimed in ~~one of claims 1 to 8~~ claim 1, wherein ~~a nitrogen oxide-containing~~ said gas comprising nitrogen oxide is introduced into the said flame reaction zone.

Claim 10 (Currently Amended): A process as claimed in ~~one of claims 1 to 9~~ claim 1, wherein ~~the~~ said nitrogenous hydrocarbons or said hydrocarbon mixture ~~mixture used are~~ are/is introduced in liquid form into the said flame reaction zone.

Claim 11 (Currently Amended): A process as claimed in claim 10, wherein ~~the~~ said nitrogenous hydrocarbons ~~used~~ are atomized to form liquid droplets having a mean particle diameter of  $<100\text{ }\mu\text{m}$ .

Claim 12 (Currently Amended): A process as claimed in claim 10-~~or 11~~, wherein ~~the~~ said nitrogenous hydrocarbons or said hydrocarbon mixture is/are ~~mixture used are~~ introduced as an aqueous emulsion into the said flame reaction zone.

Claim 13 (Currently Amended): A process as claimed in claim 12, wherein ~~the~~ said aqueous emulsion ~~used~~ is atomized to form liquid droplets having a particle diameter of <100  $\mu\text{m}$ .

Claim 14 (Currently Amended): A process as claimed in ~~one of claims 1 to 9~~ claim 1, wherein ~~the~~ said nitrogenous hydrocarbons ~~used~~ are introduced in the gaseous state into the said flame reaction zone.

Claim 15 (Currently Amended): A process as claimed in claim 14, wherein ~~the~~ said gaseous nitrogenous hydrocarbons are premixed with at least a part of the feed gas constituents selected from the group consisting of said oxygen-containing gas, said ammonia, ~~the nitrogen oxide-containing~~ said gas comprising nitrogen oxide, said water and ~~the~~ said essentially inert-behaving feed gas constituents, and the resultant gas mixture is introduced into the said flame reaction zone.

Claim 16 (Currently Amended): A process as claimed in ~~one of claims 1 to 15~~ claim 1, wherein turbulent flow prevails in the said reaction zones.

Claim 17 (Currently Amended): A process as claimed in ~~one of claims 1 to 16~~ claim 1, wherein ~~the resultant cleavage gas comprises at least the constituents hydrogen cyanide,~~

~~carbon oxides, hydrogen, water, ammonia, nitrogen and light hydrocarbons and the~~  
separation of ~~the resultant~~ said cleavage gas comprises ~~the steps:~~

- (i) cooling ~~the~~ said cleavage gas to a temperature  $<300^{\circ}\text{C}$ ;
- (ii) removing said ammonia as ammonium sulfate or ammonium phosphate by gas scrubbing, ~~with~~ to obtain an ammonia-depleted cleavage gas ~~being obtained~~;
- (iii) removing said hydrogen cyanide as aqueous hydrogen cyanide solution~~[[,]]~~ to obtain a hydrogen cyanide-depleted and ammonia-depleted residual cleavage gas ~~being obtained~~;
- (iv) recovering hydrogen cyanide from ~~the~~ said aqueous hydrogen cyanide solution by distillation; and
- (v) where appropriate, partially recirculating ~~the~~ said residual cleavage gas to ~~the~~ said flame reaction zone.